

Cognizant Academy

Full Stack Delta Learning Learning Guide Java React Track



Program at a glance

Delta Learning covers the below mentioned skills

- JQuery
- Oracle PL/SQL
- Unix and Shell Scripting
- Application Debugging
- Jenkins, GIT and Jira
- React
- AWS

Delta Learning: JQuery

Overall Duration: 2 days

Day 1

jQuery

What is jQuery, Advantages of jQuery, Element selector, The #id selector, The .class selector, Finding elements, Filtering out elements, DOM traversing methods.

Learning Reference:

[Java-jQuery-Objectives](#)

- Refer the Objectives with Topic ID : jQuery-T01, jQuery-T02, jQuery-T03

Hands-on:

- [jQuery-T02-HOL_001](#)
- [jQuery-T02-HOL_002](#)
- [jQuery-T03-HOL_001](#)

Day 2

jQuery

DOM replacement, DOM manipulation methods, Event object, Event types, Binding event handlers, Removing event handlers, Event methods, Event helper methods.

Learning Reference:

[Java-jQuery-Objectives](#)

- Refer the Objectives with Topic ID : jQuery-T04, jQuery-T05

Hands-on:

- [jQuery-T04-HOL_001](#)
- [jQuery-T04-HOL_002](#)
- [jQuery-T04-HOL_003](#)
- [jQuery-T04-HOL_004](#)
- [jQuery-T05-HOL_001](#)

Delta Learning: Oracle PL/SQL

Overall Duration: 2 days

Day 3

Oracle PL/SQL

PL SQL Basic Blocks, PL SQL Statements, PL SQL Procedures, Functions, Packages

Learn and Practice:

Refer Sections: 2.2.2 Schema Object Names, 2.2.3 Table Design Considerations, 2.3.1 Supported Oracle Data Types

[MYSQL vs Oracle SQL](#)

Learning Reference:

Oracle PL/SQL TOC:

- Refer to the TOC listed [here](#).

Hands-on:

- [Day1 HandsOn](#)

Day 4

PL SQL Procedures, Functions, Packages, Cursors and Triggers

Oracle PL/SQL

Learning Reference:

Oracle PL/SQL TOC:

- Refer to the TOC listed [here](#).

Hands-on:

- [Day2 HandsOn](#)

Delta Learning: UNIX and Shell Scripting

Overall Duration: 2 days

Day 5 and 6

Learning Reference:

Unix and Shell Scripting:

- Go through the content given [here](#).

Go through web pages for learning below specific topics

- [PowerShell vs Bash](#)
- [vi Editor](#)
- [Kill a Process](#)

Hands-on:

- [Unix HandsOn](#)

JSON

[Overview](#)
[Syntax](#)
[Data Types](#)
[Objects](#)
[Stringify](#)

YAML

[Introduction](#)
[Basics](#)

Delta Learning: React

Overall duration: 8 days

This module deals with topics on React

Day 7

React

SPA, benefits of SPA, Pros & Cons of SPA, React & its features, virtual DOM.
React Components, types of components, React - props, React –
state, ReactDOM.render

Learning Reference:

Download the Learning [objectives](#) of React.

- Refer the Objectives with Topic ID : React-T01, React-T02, React-T03

Hands-on:

- [ReactJS-HOL_001](#)
- [ReactJS-HOL_002](#)
- [ReactJS-HOL_003](#)
- [ReactJS-HOL_004](#)
- [ReactJS-HOL_005](#)

Day 8

React

Features of ES6, ES6 classes, ES6 arrow functions.

Learning Reference:

Download the Learning [objectives](#) of React.

- Refer the Objectives with Topic ID : React-T04

Hands-on:

- [ReactJS-HOL_006](#)
- [ReactJS-HOL_007](#)

Day 9

React

React – events, conditional rendering. Implementation of conditional rendering in React, React list, React keys, maps.

Learning Reference:

Download the Learning [objectives](#) of React.

- Refer the Objectives with Topic ID : React-T05, React-T06, React-T07

Hands-on:

- [ReactJS-HOL_008](#)
- [ReactJS-HOL_009](#)

- [ReactJS-HOL_010](#)

Day 10 and 11

React

React forms, form submission, form validation, handling error messages, consume REST API in React

Learning Reference:

Download the Learning [objectives](#) of React.

- Refer the Objectives with Topic ID : React-T08

Hands-on:

- [ReactJS-HOL_011](#)
- [ReactJS-HOL_012](#)
- [ReactJS-HOL_013](#)

Day 12,13 and 14

Case Study Development:

React specification given [here](#) should be implemented.

Assessment:

- **Assess Type 2: React Knowledge Based Assessment**

Delta Learning – Application Debugging, Tools and Enhancement project

Overall duration: 3 days

This module deals with **Application debugging techniques, Enhancement project,**

DevOps and SCM tools

Day 15

Application Debugging

- Go through the [video](#) and download the [code](#). Debug the application as per the video and do the hands-on

Learning reference:

Download the Learning objectives of [Application debugging](#).

Demo Video:

1. [Eclipse Debugging.mp4](#) - Basic application debugging concepts using eclipse

Hands-On:

- [Debugging HOL 001](#)

Additional Learning:



[Eclipse Debugging Techniques And Tricks](#)

- Go through the entire course.

Day 16

DevOps and SCM tools.

Learning reference:

Download the Learning objectives of [Jenkins](#).

- Refer the objectives with Topic Id **Jenkins-T01** of the learning objectives.

Hands-On:

- [Jenkins Java](#)

Learning reference:

Please go through the learning [Jira for Beginners - Detailed Course to Get Started in Jira](#) to understand the basic and use of Software Configuration Management tool Jira.

Day 17

DevOps and SCM tools.

This module deals with basics of GIT and its basic implementation.

Learning reference:

Download the Learning objectives of [Git-Objectives](#).

- Refer the objectives with Topic Id GIT-T01, GIT-T02 of the learning objectives.

Hands-On:

- [Git-T02-HOL_001](#)
- [Git-T02-HOL_002](#)
- [Git-T03-HOL_001](#)
- [Git-T03-HOL_002](#)
- [Git-T03-HOL_003](#)

DevOps and SCM tools.

This module deals with basics of GIT and its basic implementation.

Learning reference:

Download the Learning objectives of [Git-Objectives](#).

- Refer the objectives with Topic Id GIT-T04 of the learning objectives.

Overall Duration: 4 days

Day 18 to 21

Install software's for a simple Console and web application in a VM, Deploy/Test the application in the VM, Jenkins to perform CICD using a VM, Create a React application that consumes the Spring REST Service.

Learning Reference:

Objectives:

Refer to the objectives listed [here](#).

Hands-On

[React Spring REST Hands-on](#)

 [EC2-Instance-Software-Installation-And-Access-Hands-On.mp4](#)

 [CICD-Jenkins-EC2-Hands-on.mp4](#)